

Abstract of the Disclosure

ADAPTIVE CONTROL OF FUEL QUANTITY LIMITING MAPS IN AN
ELECTRONICALLY CONTROLLED ENGINE

A method and system for adjusting the application of map limits to compensate for injector variability in an electronically controlled fuel injection system is disclosed. Fuel quantity limiting maps are stored in memory within the electronic control module of an electronically controlled fuel injector system. The application of the fuel quantity limiting maps is adjusted for individual injector performance characteristics. If a fuel injector dispenses too much fuel at a particular on time, the quantity limited in the map limit is decreased. Similarly, if a fuel injector dispenses too little fuel at a particular on time, the quantity limited in the map limit is increased. As one result, limiting maps do not unduly limit fuel quantity for an injector dispensing too little fuel at that on time due to injector variability. As another result, limiting maps properly limit fuel quantity for an injector dispensing too much fuel at that on time due to injector variability.